

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-14 (Canceled)

15. (New) An arthroplasty implant for providing a joint between a first body member and a second body member, the arthroplasty implant comprising:

a first component defining a concave surface and having a first connector connecting the first component to the first body member;

a second component defining a convex surface and having a second connector connecting the second component to the second body member; and

an intermediate component positioned between the first component and the second component and defining a convex surface slidable on the concave surface of the first component to allow articulation between the first component and the intermediate component and a concave surface slidable on the convex surface of the second component to allow articulation between the second component and the intermediate component.

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16. (New) The arthroplasty implant according to claim 15 wherein the concave surface of the first component and the convex surface of the intermediate component are complementally, spherically curved.

17. (New) The arthroplasty implant according to claim 15 wherein each of the convex surface of the second component and the concave surface of the intermediate component is defined by radii of curvature which differ in mutually orthogonal directions.

18. (New) The arthroplasty implant according to claim 15 wherein a length of the convex surface of the second component in a direction defined by a relatively large radius of curvature is greater than a length of the convex surface in a direction defined by a relatively small radius of curvature.

19. (New) The arthroplasty implant according to claim 15 wherein each of the first component and the second component is capable of translation and articulation relative to the intermediate component.

20. (New) The arthroplasty implant according to claim 15 wherein each of the first component and the second component is made of grade 5

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titanium and each of the concave surface and the convex surface has a titanium nitride finish.

21. (New) The arthroplasty implant according to claim 15 wherein the intermediate component is made of a low friction plastic material.

22. (New) The arthroplasty implant according to claim 21 wherein the plastic material is ultra high molecular weight polyethylene.

23. (New) The arthroplasty implant according to claim 15 wherein the first connector and the second connector each includes a projecting post locatable in a hole formed in a respective body member.

24. (New) The arthroplasty implant according to claim 15 further comprising a central projection on the concave surface of the first component and a central opening in the convex surface of the intermediate component, the central projection positionable within the central opening to prevent lateral separation of the intermediate component and the first component.

25. (New) The arthroplasty implant according to claim 24 wherein the concave surface of the first component is bounded by a first peripheral edge and the convex surface of the intermediate component is bounded by a second peripheral edge, the first peripheral edge contacting the second peripheral edge when relative movement between the first component and the intermediate component reaches a maximum limit.

26. (New) The arthroplasty implant according to claim 15 wherein one of the first component and the intermediate component includes a laterally outwardly facing projection and the other of the first component and the intermediate component includes a laterally inwardly facing recess, the projection interacting with the recess to prevent lateral separation of the intermediate component and the first component.

27. (New) The arthroplasty implant according to claim 15 wherein the first component includes an annular wall bounding the concave surface of the first component, the annular wall being formed with an annular undercut defining a laterally inwardly facing recess, and the intermediate component includes an annular rib defining a laterally outwardly facing projection, interaction between the

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annular rib and the annular undercut preventing lateral separation of the intermediate component and the first component.

28. (New) The arthroplasty implant according to claim 15 wherein the first component is a phalangeal component of a metatarsophalangeal joint implant and is connectable to a phalanx, and the second component is a tarsal component of the metatarsophalangeal joint implant and is connectable to a tarsus.

29. (New) The arthroplasty implant according to claim 15 wherein the second component is movable with respect to the intermediate component in mutually orthogonal directions.

30. (New) An arthroplasty implant for providing a joint between a first body member and a second body member, the arthroplasty implant comprising:

a first component defining a concave surface and having a first connector connecting the first component to the first body member;

a second component defining a convex surface and having a second connector connecting the second component to the second body member;

an intermediate component positioned between the first component and the second component and defining a convex surface slidable on the concave surface of the first component to allow articulation between the first component and the intermediate component and a concave surface slidable on the convex surface of the second component to allow articulation between the second component and the intermediate component; and

a central projection formed on the concave surface of the first component and a central opening formed in the convex surface of the intermediate component, the central projection positionable within the central opening and preventing lateral separation of the intermediate component and the first component.

31. (New) The arthroplasty implant according to claim 30 wherein the concave surface of the first component is bounded by a first peripheral edge and the convex surface of the intermediate component is bounded by a second peripheral edge, the first peripheral edge contacting the second peripheral edge as relative movement between the first component and the intermediate component reaches a maximum limit.

32. (New) An arthroplasty implant for providing a joint between a first body member and a second body member, the arthroplasty implant comprising:

a first component defining a concave surface and having a first connector connecting the first component to the first body member;

a second component defining a convex surface and having a second connector connecting the second component to the second body member;

an intermediate component positioned between the first component and the second component and defining a convex surface slidable on the concave surface of the first component to allow articulation between the first component and the intermediate component and a concave surface slidable on the convex surface of the second component to allow articulation between the second component and the intermediate component, one of the first component and the intermediate component including a laterally outwardly facing projection and the other of the first component and the intermediate component including a laterally inwardly facing recess, the projection interacting with the recess and preventing lateral separation of the intermediate component and the first component.

33. (New) The arthroplasty implant according to claim 32 wherein the first component includes an annular wall bounding the concave surface

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of the first component, the annular wall being formed with an annular undercut defining the laterally inwardly facing recess, and the intermediate component includes an annular rib defining the laterally outwardly facing projection, interaction between the annular rib and the annular undercut preventing lateral separation of the intermediate component and the first component.

34. (New) The arthroplasty implant according to claim 32 wherein the first connector and the second connector each includes a central projecting post locatable in a hole formed in a respective body member.
